FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-3861
FACILITY NAME: DRAPER VALLEY FARMS, Inc.

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INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST-3861. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to the City of Mount Vernon POTW. This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A—Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response.

GENERAL INFORMATION	
Applicant	Draper Valley Farms, Inc.
Facility Name and Address	Draper Valley Farms, Inc. PO Box 838 1000 Jason Lane Mount Vernon, WA 98273
Type of Facility	Chicken Processor
Facility Discharge Location	Latitude: 48° 26' 02" N Longitude: 122° 19' 45" W
Treatment Plant Receiving Discharge	City of Mount Vernon POTW
Contact at Facility	Name: Michael Pagano Maintenance Manager Telephone #: (360) 424-7947
Responsible Official	Name: John Jefferson Title: Vice President Address: PO Box 838 1000 Jason Lane Mount Vernon, WA 98273 Telephone #: (360) 424-7947 FAX #: (360) 424-1666

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

Plant Operations

Approximately 95,000 birds are processed per day, yielding approximately 250,000 pounds of chicken product per day.

Trucks loaded with birds are held in a covered area until an unloading area is available. The truck is then moved to the unloading area. Birds are unloaded. The cages on the truck are then thoroughly cleaned by being hosed off. Once the birds are unloaded, the following processes occur in the plant:

1. unload onto trolley, slit throat
2. scald
3. remove feathers
4. eviscerate (mechanical)
5. inspect (USDA)
6. chill
7. sort for size, place back on line
8. cutting

Sources of Wastewater From Plant Operations

Trenches are arranged below the trolley used to convey birds through the plant. Most wastewater generated at this plant comes from periodic cleaning, which is required to meet USDA regulations. In addition, the scalding and chilling tanks are drained at the end of each shift. The scalding and chilling tanks are low in BOD and TSS concentrations compared to the general cleanup water.

Noncontact cooling water used for cooling of the chillers is also periodically blown down from a chiller system located on the roof of the building. This wastewater runs across the parking lot to the sump. Water collected in the sump is run through the DAF system.

Water from cage cleaning and chicken offal from the holding area comprise other sources of wastewater. The paved area behind the plant subject to contamination drains to a sump which is pumped to the DAF system.

Storm Water

Storm water captured on the paved area behind the plant is discharged to a sump. This water is captured and sent to a pit, from where it is discharged through the final rotary screen and DAF system. The capacity of the pit is approximately 1000 gallons. The pit is equipped with a pump equipped with a level switch. The pit is equipped with an overflow line, for use in heavy storm surcharges. Any overflow which occurred would be to the creek on the south side of the paved area. Overflow of contaminated water is not authorized by this permit.

Storm water captured on the west side of the building is discharged to a ditch by a railroad grade. This storm water is not expected to be significantly impacted by industrial activities.

Draper Valley Farms has been assigned NPDES Storm Water General Permit SO3000552C. The Permittee submitted a Storm Water Pollution Prevention Plan as a requirement of the storm water permit. Catch basins CB1 through CB8 are described on the plan as discharging to storm water. Catch basins 9 through 16 discharge to the wastewater treatment system.

INDUSTRIAL PROCESSES

The greater part of the wastewater comes from the eviscerating line. Wastewater enters a trench on the floor and flows to a separate room where it is subject to drum filtering. The wastewater is then sent to a vibratory screen, and finally, the dissolved air flotation unit.

DISSOLVED AIR FLOTATION SYSTEM

Two separate waste streams enter the pretreatment area. One of these waste streams is associated with feather removal operations. The other waste stream is general cleanup water associated with viscera. Each of these waste streams passes through a dedicated drum filter. The two waste streams join in a pit following filtering, from where they are pumped to a second rotary screen. Potentially contaminated storm water from the paved area of the plant is also directed to this sump. The water from the sump is pumped through a rotary screen into the DAF system. Ferric chloride is introduced just upstream of the rotary screen. The ferric chloride acts as a flocculating aid, but is also used to condition the pH to the desired level (4.8) in the DAF tank. A pH probe is located downstream of the rotary screen. CESCO PF622CHG (cationic polyacrylamide polymer) is also added at this point. The conditioned wastewater then enters the DAF unit. The skimmings are removed at the effluent end of the DAF unit by means of a paddle wheel collector. The treated wastewater leaves the DAF unit by passing under a weir.

An Edur brand multiphase centrifugal pump, rather than a compressor, is used to introduce air into the DAF system. The pump system is rated at 100 gpm and 100 psi, with a 44 liter per minute air delivery. The pressure at the end of the pipe is 90 PSI.

Every two hours the DAF system operator checks the calibration on the pH probe and records the pH and calibration details in a log. The target pH in the DAF system is approximately 4.8. This lower pH has been found to result in greatly improved performance. As this pH is too low for discharge to the sanitary system, CESCO Neutro 1025, the main active ingredient of which is sodium hydroxide, is added by means of manual adjustment of the flow rate to the DAF unit effluent. The control system is already partially set up for automatic control, although it has not been implemented.

Spare pH probes, as well as backup pumps, are maintained on site for the DAF system.

CESCO, the chemical supplier and pretreatment system consultant, has been retained for oversight of system operations. They take periodic COD samples as part of their oversight functions. City of Mount Vernon sampling values for BOD_5 seldom exceed 200 mg/L in the treated effluent. Therefore, the concentration of the BOD_5 in the final effluent is similar to that

of typical domestic wastewater. Oil and grease concentrations are typically less than 5 mg/L. A history of consistency in meeting oil and grease standards has resulted in the Department including a quarterly sampling frequency for oil and grease in the permit, as opposed to more frequent sampling. BOD_5, TSS, and oil and grease sampling results indicate compliance with AKART requirements.

In 1999, Draper Valley Farms retained CESCO Chemicals to evaluate the performance of the DAF system, and to recommend modifications to the system, if necessary. Significant changes in chemistry and controls were implemented in January 2000. In their report dated June 29, 2000, CESCO Chemicals presented sampling data and a statistical analysis which indicated that the upgraded system was able to achieve consistent compliance with BOD_5 and TSS standards. Most of the existing tankage and piping hardware, including the DAF tank itself, were retained. Changes included pH monitoring, automated metered addition of ferric chloride, new chemical metering pumps, analyzers, and control instrumentation.

SOLID WASTE HANDLING

Solid waste generated from this plant consists of the following:

Feathers: Feathers are removed from the scalder effluent line by means of a drum filter. Feathers are transferred by means of an auger to a separate feather tank on a truck trailer.

Viscera/Chicken Parts: Viscera are removed from the rotary screen in the plant line cleaning effluent. The viscera/chicken parts are transferred to a separate holding tank on a truck trailer.

Blood: Blood which is captured is stored in a separate blood tank located below the truck trailer.

DAF Skimmings: The skimmings from the pretreatment system are loaded onto the feather trailer.

All of the above solid waste byproducts are loaded directly onto truck trailers, and hauled to West Coast Reduction in Vancouver, BC. Hauling is performed by Price Trucking.

Spent solvents and oils generated from incidental operations are removed from the facility by Safety-Kleen.

PERMIT STATUS

The previous permit for this facility was issued on May 29, 1998. Draper Valley Farms requested a permit modification in their letter of January 11, 2000. The letter contained a request that their daily maximum flow limitation be increased from 450,000 gallons per day to 630,000 gallons per day. The increased water usage in the chicken processing plant is due to increased bird throughput as well changes in USDA requirements. Due to efforts at improving DAF plant operation, net increases in BOD and TSS mass loading to the City of Mount Vernon were not expected.

The City of Mount Vernon's letter of December 27, 1999, contains an agreement by the City of Mount Vernon to "increase Draper Valley Farms' permitted flow to 630,000 gallons per day." The letter did not specifically address a change in the consecutive three-day average limitation. However, in a letter dated April 13, 2000, Mount Vernon clarified their position on the three-day average flow limitation by requesting that it be deleted.

On July 14, 2000, the Department issued a Modified State Waste Discharge Permit. The modified permit contained an increase in the daily maximum flow limitation from 450,000 gallons per day maximum consecutive three-day average to a daily maximum of 630,000 gallons per day.

An application for permit renewal was submitted to the Department on November 27, 2002. The submitted application was determined to be deficient due to the lack of a signature from the POTW operator in Part J. In addition, the City refused to accept the application from the Permittee and required submittal by the Department. Following submittal by the Department, the City determined that certain items in the application were inadequately completed. The application was returned to the Department, which subsequently returned the application to the Permittee. Draper Valley Farms submitted an application to the Department on June 19, 2003. The Department obtained the City of Mount Vernon's signature on Part J of the application on August 12, 2003.

The stormwater from this facility is covered under the Industrial Stormwater General Permit. The permit number associated with this permit for the Draper Valley Farms facility is SO3-000552. The permit assigned this number was issued on November 18, 2000, and bears an expiration date of November 18, 2005. However, the generic Industrial Stormwater General Permit contains an issuance date of August 21, 2002, and an expiration date of September 20, 2007.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility last received an inspection on May 1, 2003. During that inspection, it was determined that the Permittee was reporting flow on the basis of a three-day moving average instead of a daily maximum as required in the permit. The State Waste Discharge Permit contains provisions that require that the Permittee monitor and report flow on a daily maximum basis. BOD_5 and TSS reporting requirements are set in the permit on the basis of a three-day rolling average.

A previous inspection was conducted on July 11, 1996. At that time, submittal of a plan for separation of contaminated and uncontaminated water was discussed. As a General Industrial Stormwater Permit has subsequently been issued to the facility, the portions of the existing permit dealing with stormwater will largely be eliminated in the proposed permit.

On June 29, 2000, Draper Valley Farms submitted a report to the Department entitled *Draper Valley Farms Wastewater Improvement Project – Summary Report* dated June 29, 2000. The report contained information indicating that Draper Valley Farms had achieved average BOD and TSS reductions of 44% and 25%, respectively, on a pounds-per-day basis, since implementation of CESCO Chemicals, Inc. treatment program and completion of several mechanical improvements to the wastewater treatment system on January 17, 2000. Modifications included a change in treatment chemistry, a new chemical feed system including chemical metering pumps, inline sensors, analyzers, and control instrumentation to automatically adjust chemical feed rates to match system demand. An extensive onsite service package was also included.

On May 2, 2000, Draper Valley Farms submitted a Notice of Unavoidable Bypass of their pretreatment system, as an explanation of an exceedance of BOD and TSS limitations on May 1, 2000. The bypass was associated with work being performed to upgrade their pretreatment system. The Department made no formal finding with respect to the purported unavoidability of the bypass.

On January 20, 2000, the City of Mount Vernon issued a penalty fee in their sewer bill as a result of BOD and TSS violations.

In a letter of December 8, 2000, Draper Valley Farms' treatment chemical supplier, acting on behalf of Draper Valley Farms apprised the Department of an "*upset in their primary pretreatment wastewater system starting on August 29. The upset resulted in Draper Valley Farms exceeding their discharge permit for TSS (766 lbs/day for the period 8/29-8/31/00 and 887 lbs/day for the period 8/30-9/1/00) and BOD (1374 lbs/day for the period 8/30-9/1/00)*." The contents of the letter contained the observation that a mislabeled tote of flocculant had resulted in the violation. Cesco further described quality control procedures which would be undertaken to prevent a recurrence of mislabeled product.

The Department issued Draper Valley Farms a Notice of Violation on October 29, 1999, for the following violations:

October 29, 1999, Notice of Violation Citations			
Reporting Period	**Parameter**	**Reported Value**	**Permit Limit**
May 1999	Flow, daily maximum	550,000 gpd	450,000 gpd
May 1999	TSS 3-day average	756 pounds per day	750 pounds per day
June 1999	Flow, daily maximum	546,000 gpd	450,000 gpd
June 1999	TSS 3-day average	961 pounds per day	750 pounds per day

Draper Valley Farms responded to the above Notice of Violation in a letter of November 12, 1999. Draper Valley Farms noted that, due to HACCP regulations effective January 25, 1999, their consumption of water had increased. An article from *Meat Processing* was enclosed with the letter to verify the existence of the new USDA regulations, which included a "no visible fecal" contamination standard. The Permittee related that they had undertaken an evaluation of their current procedures and equipment, as well as discussions with the City of Mount Vernon with the object of obtaining authorization to discharge up to 630,000 gallons per day. Draper Valley Farms issued a formal request for a permit modification subsequently in a letter of January 11, 2000.

The Department issued a Notice of Correction to Draper Valley Farms on May 26, 1999. The letter addressed the following violations:

May 26, 1999, Notice of Correction Citations			
Reporting Period	**Parameter**	**Value**	**Permit Limit**
January 1999	Flow (daily maximum)	538,000 gpd	450,000 gpd
February 1999	Flow (daily maximum)	466,000 gpd	450,000 gpd
March 1999	Flow (daily maximum)	561,000 gpd	450,000 gpd

The Department issued a Notice of Correction on July 30, 1998. The letter addressed the following violations:

July 30, 1998, Notice of Correction Citations			
Reporting Period	**Parameter**	**Value**	**Permit Limit**
May 1998	BOD_5, average	1755 pounds per day	1300 pounds per day
June 1998	BOD_5, average	1704 pounds per day	1300 pounds per day
May 1998	Flow	512,000 gallons per day	450,000 gallons per day
May 1998	TSS	900 pounds per day	750 pounds per day
June 1998	TSS	868 pounds per day	750 pounds per day

WASTEWATER CHARACTERIZATION

The concentration of pollutants in the discharge was reported in the permit application and in discharge monitoring reports. The proposed wastewater discharge is characterized for the following parameters:

Discharge Characteristics (October 2001-December 2002)				
Pollutant Parameter	**Flow (gallons per day)**	**BOD_5 (pounds per day)**	**TSS (pounds per day)**	**FOG (mg/L)**
Limit	**600,000**	**1300**	**750**	**100**
October 2001	597,000	844	442	6.1
November 2001	532,000	921	372	
December 2001	524,000	988	468	
January 2002	531,000	820	398	6
February 2002	530,000	819	539	
March 2002	555,000	773	561	
April 2002	580,000	940	749	<2.5
May 2002	599,000	966	969	
June 2002	577,000	970	781	
July 2002	570,000	891	602	2.7
August 2002	580,000	1021	544	
September 2002	577,000	1055	501	
October 2002	577,000	1024	617	<2.5
November 2002	617,000	936	453	
December 2002	571,000	969	338	

SEPA COMPLIANCE

The plant is preexisting and has already been issued a permit. Therefore, demonstration of SEPA compliance is not required.

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known, available and reasonable treatment (AKART) and not interfere with the operation of the POTW.

Dissolved air flotation is normally considered to be consistent with the requirement for compliance with AKART standards for discharges from this type of plant. Recent records indicate that the plant has been operated in such a manner as to result in wastewater similar to domestic wastewater with respect to BOD and TSS concentrations. The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110). Permit limitations for oil and grease, and pH are based on AKART.

An oil and grease limitation of 100 mg/L has been placed in the permit. This oil and grease limitation, typical of those imposed by municipalities for indirect discharges, is the result of many years of experience with respect to simple systems for removal of oil and grease. The system employed by Draper Valley Farms has consistently performed resulted in effluent values well below 100 mg/L for oil and grease.

pH limitations have been included in this permit due to the potential for overdosing of treatment chemicals resulting in pH characteristics in the effluent inconsistent with state limitations. WAC 173-216 contains a minimum pH limitation of 5.0 and a maximum pH limitation of 11.0.

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

In order to protect the City of Mount Vernon from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary. The limitations for flow, BOD, and TSS are based on allocation agreements developed between the City of Mount Vernon and Draper Valley Farms. The limits in the proposed permit are shown in the following table.

Pollutant concentrations in the proposed discharge with technology-based controls in place are not expected to cause problems at the receiving POTW, such as interference, pass-through, or hazardous exposure to POTW workers, nor are they expected to result in unacceptable pollutant levels in the POTW's sludge.

COMPARISON OF LIMITATIONS IN THE PROPOSED PERMIT WITH THOSE IN THE EXISTING PERMIT ISSUED MAY 28, 1998, AND MODIFIED JULY 14, 2000

The following table indicates the values of the discharge limitations contained in the existing and proposed permits.

Limitations in the Existing and Proposed Permits				
Pollutant Parameter	**Limitations in Existing (Modified) Permit**		**Proposed Limitations**	
	Maximum Consecutive Three-day Average	**Daily Maximum**	**Maximum Consecutive Three-day Average**	**Daily Maximum**
Flow, gallons per day	N/A	630,000	630,000	N/A
BOD_5, pounds per day	1300	N/A	1300	N/A
TSS, pounds per day	750	N/A	750	N/A
Fats, Oils, and Greases (mg/L)	N/A	100	100	N/A
pH (standard pH units)	N/A	N/A	N/A	Not outside the range of 6.0 to 11.0

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Conditions S1 and S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges [WAC 173-216-110 and 40 CFR 403.12 (e), (g), and (h)].

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

SOLID WASTE PLAN

The Department has determined that the Permittee has a potential to cause pollution of the waters of the state from leachate of solid waste.

This proposed permit requires, under authority of RCW 90.48.080, that the Permittee maintains a solid waste plan to prevent solid waste from causing pollution of waters of the state.

NONROUTINE AND UNANTICIPATED DISCHARGES

Occasionally, this facility may generate wastewater which is not characterized in their permit application because it is not a routine discharge and was not anticipated at the time of application. These typically are waters used to pressure test storage tanks or fire water systems or leaks from drinking water systems. These are typically clean waste waters but may be contaminated with pollutants. The permit contains an authorization for nonroutine and unanticipated discharges. The permit requires a characterization of these waste waters for pollutants and examination of the opportunities for reuse. Depending on the nature and extent of pollutants in this wastewater and opportunities for reuse, Ecology may authorize a direct discharge via the process wastewater outfall, require the wastewater to be placed through the facilities wastewater treatment process or require the water to be reused.

SPILL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under Section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The proposed permit requires the Permittee to maintain a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs.

SLUG DISCHARGE CONTROL PLAN

The Department has determined that the Permittee has the potential for a batch discharge or a spill that could adversely effect the POTW, therefore, a slug discharge control plan is required [40 CFR 403.8 (f)].

GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending, or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes, or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for a period of five (5) years.

REFERENCES FOR TEXT AND APPENDICES

Washington State Department of Ecology.

Laws and Regulations (http://www.ecy.wa.gov/laws-rules/index.html)

Permit and Wastewater Related Information
(http://www.ecy.wa.gov/programs/wq/wastewater/index.html)

APPENDICES

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page one of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public Notice of Application (PNOA) was published on September 3 and September 10, 2002, in the *Skagit Valley Herald* to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department published a Public Notice of Draft (PNOD) on October 24, 2003, in the *Skagit Valley Herald* to inform the public that a draft permit and fact sheet were available for review. Interested persons were invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents were available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments were mailed to:

Water Quality Permit Coordinator
Washington State Department of Ecology
Northwest Regional Office
3190 160th Avenue SE
Bellevue, WA 98008-5452

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30)-day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (425) 649-7025, or by writing to the address listed above.

APPENDIX B—GLOSSARY

Ammonia—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation—The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)—Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD_5—Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD_5 is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass—The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling—A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling—A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).

Construction Activity—Clearing, grading, excavation, and any other activity which disturbs the surface of the land. Such activities may include road building; construction of residential houses, office buildings, or industrial buildings; and demolition activity.

Continuous Monitoring—Uninterrupted, unless otherwise noted in the permit.

Engineering Report—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample—A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial User—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business; from the development of any natural resource; or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference—A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
- Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) [including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including state regulations contained in any state sludge management plan prepared pursuant to Subtitle D of the SWDA], sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local Limits—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)—The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Pass-through—A discharge which exits the POTW into waters of the state in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of state water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User—A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

a. Exceeds 0.5% of treatment plant design capacity criteria and discharges <25,000 gallons per day; or

b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass-through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation Level (QL)—A calculated value five times the MDL (method detection level).

Significant Industrial User (SIU)—

1. All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and

2. Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement [in accordance with 40 CFR 403.8(f)(6)].

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of nondelegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge—Any discharge of a nonroutine, episodic nature, including but not limited to an accidental spill or a noncustomary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria—A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids—That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS)—Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.